

**United States Department of the Interior
Bureau of Land Management**

RECORD OF DECISION

DOI-BLM-UT-070-2008-14

August 12, 2016

**Final Supplemental Environmental Impact Statement
for the Leasing and Underground Mining of the
Greens Hollow Federal Coal Lease Tract
UTU-84102**

Location: Manti-La Sal and Fishlake National Forests, Price and Richfield, Utah
Sanpete and Sevier Counties, Utah

**U.S. Department of the Interior
Bureau of Land Management
Utah State Office
440 West 200 South, Suite 500
Salt Lake City, Utah 84101-1345
Phone: 801-539-4001
FAX: 801-539-4013**

Record of Decision

Decision to Hold Competitive Lease Sale: *Greens Hollow Federal Coal Lease Tract*

United States Department of the Interior

Bureau of Land Management

Utah State Office

Salt Lake City, Utah

Introduction

This Record of Decision (ROD) documents the United States Department of Interior (USDI) Bureau of Land Management's (BLM) decision to hold a federal coal competitive lease sale for the Greens Hollow Federal Coal Lease Tract (UTU- 84102). This decision is based on the fulfillment of the requirements for competitive federal coal leasing found in Title 43 Subpart 3420 of the Code of Federal Regulations (CFR).

On October 13, 2005, the BLM's Utah State Office received an application for a competitive Federal coal lease by application (LBA) from Ark Land Company for lands referred to herein as the Greens Hollow Tract (Tract). Ark Land Company applied to the BLM to lease the coal reserves in the Tract for the purpose of lengthening the production life of the Southern Utah Fuel Company (SUFCO) Mine. The existing mine and the lease Tract are located in Sanpete and Sevier Counties, Utah.

The Greens Hollow Tract lies immediately adjacent to and generally northwest of the SUFCO mine, and the coal in the Tract can be directly accessed through an extension of underground workings from the existing mine. The tract is made up of two coal seams - the Upper and Lower Hiawatha. After initiating the application process, the Ark Land Company later requested assignment of the LBA for the Tract to the Canyon Fuel Company, LLC. The assignment request was approved July 1, 2014 by the BLM.

The existing SUFCO mine is owned by Canyon Fuel Company, LLC. The Greens Hollow Tract, as originally described in the LBA, contained about 5,637 acres of National Forest System (NFS) Lands. On May 24, 2006, Arc Land Company provided a revised LBA that included an additional 539 acres of NFS land to the Tract. The total acreage of the Tract, as modified, is approximately 6,175 acres. The Manti-La Sal National Forest manages approximately 6,096 acres and the Fishlake National Forest manages 79 acres. A full legal description of the Tract is set forth in Appendix 1 to this ROD. Coal reserves in the Tract are estimated at 73.4 million in-place tons of coal. However, under the BLM's selected alternative approved by this ROD, the lease tract to be offered contains approximately 55.7 million tons of technically recoverable coal.

The Greens Hollow Federal Coal Lease Tract Final Supplemental Environmental Impact Statement (Final SEIS) has been prepared to analyze the potential physical, biological, social, and economic effects associated with leasing and mining the federal coal reserves in the Tract,

which are administered by the BLM. The BLM and the Forest Service jointly prepared the Final SEIS with the USDI Office of Surface Mining Reclamation and Enforcement (OSMRE) acting as a cooperating agency.

Pursuant to the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended, 43 USC 4321 *et seq.*, its implementing regulations, and other applicable laws (e.g., the Mineral Leasing Act of 1920, as amended (MLA)), 43 USC 181 *et seq.*, the Final SEIS disclosed the direct, indirect, and cumulative impacts of a no action alternative and two action alternatives in response to the LBA for the Greens Hollow Tract.

It is the BLM's responsibility to manage federal mineral resources on public lands in accordance with all applicable laws, policies, and regulations, including the MLA, the Federal Land Policy and Management Act of 1976, as amended (FLPMA). Processing the LBA for the Greens Hollow Tract and deciding to lease the tract as outlined in this ROD is consistent with agency policies and the BLM's federal coal leasing program. In addition to reviewing lease applications, under the applicable laws and regulations, the BLM is also responsible for reviewing Resource Recovery and Protection Plans (R2P2) for federal coal leases to ensure they provide for maximum economic recovery and to supervise exploration operations for federal coal.

Federal coal leasing on NFS lands in Utah involves a two-stage decision process:

- First, in accordance with the MLA, and pursuant to 43 CFR § 3400.3-1 and § 3425.3(b), the Forest Supervisors for the Manti-La Sal and Fishlake National Forests must decide whether or not to consent to leasing of the coal underlying the NFS lands by the BLM. If they consent to leasing, they may require the inclusion of certain lease condition and/or stipulations to protect non-mineral resources administered and managed by the Forest Service.
- Second, in accordance with the MLA and the Department's delegation of authorities, the Utah State Director of the BLM must decide whether or not offering the tract for competitive leasing is in the public interest, and if so under what terms, conditions, and stipulations.

By law and regulation, the LBA process is an open, public, competitive, sealed-bid process. Bidding at any potential sale is not restricted to the LBA applicant. In order for BLM to award and issue a coal lease, the highest qualified bid received must meet or exceed the fair market value of the coal as determined by BLM's economic evaluation. Additionally, as required by the regulations, the BLM will review a R2P2 for that tract to ensure it fulfills the requirement of Maximum Economic Recovery (MER) and that mining is consistent with all lease terms, conditions, and stipulations.

The potential impacts of development of the Greens Hollow Tract were analyzed in the Final SEIS, which was issued on February 27, 2015. The BLM and the Forest Service jointly prepared the Final SEIS with OSMRE acting as a cooperating agency. On October 5, 2015, based on the analysis in the Final SEIS, the Forest Service issued a ROD and provided letters of consent to the BLM.

The decision in this ROD will be implemented through the federal coal leasing and permitting process as described in Sections 1.3 and 1.5 of the Final SEIS. In brief, the successful bidder (if any) will be required to follow established permitting processes to incorporate the leased Tract into a coal mining permit. Any new permit, or changes to an existing permit will be reviewed and approved (if appropriate) by the Utah Division of Oil, Gas and Mining (UDOGM) with oversight by the OSMRE. In addition, the lessee will also be required to secure any additional local, state, or federal permits that may be applicable to its mining operation on the Tract pursuant to established laws and regulations.

In the event that any contradiction or conflict between descriptions or depictions of the authorized action is found in the applicable decision documents, the order of precedence shall be as follows: first, the description(s) in this ROD, second the representations on the Decision Map in Exhibit 1 to this ROD, and finally, the descriptions found in the Final SEIS.

Alternatives Considered

Range of Alternatives and Constraints

The range of alternatives considered by the BLM and Forest Service in the Final SEIS were leasing the entire Greens Hollow Tract, a major portion of the Tract, or none of the Tract. All leasing decisions were subject to a consent-to-lease decision by the Forest Service, including required terms, conditions, and stipulations for the protection of surface, subsurface, and coal resource values.

The BLM decision in this ROD incorporates the October 2015 leasing-consent decision by the Manti-La Sal and Fishlake National Forests, including both standard terms and conditions (Appendix 2) and special stipulations (Appendix 3). The consent or conditions of the surface management agency are guided by 43 CFR § 3400.3-1, which states: "Leases for land, the surface of which is under the jurisdiction of any Federal agency other than the Department of the Interior, may be issued only with the consent of the head or other appropriate official of the other agency having jurisdiction over the lands containing the coal deposits, and subject to such conditions as that officer may prescribe to insure the use and protection of the lands for the primary purpose for which they were acquired or are being administered." The Forest Service conditions set forth in its consent to lease are intended to address the risk of potential impact from subsidence to perennial stream reaches, stock watering ponds, cultural resources, and wildlife resources. Special stipulations to reduce fugitive dust from haul road usage, reduce surface and visual impacts from infrastructure, and monitoring requirements are also included in the consent to lease.

The Forest Service conditions set forth in its consent-to-lease decision were incorporated into Alternative 3 (described below). When compared to what was proposed in the LBA as originally filed, the Forest Service conditions result in up to 900,000 tons of recoverable coal being unmined to protect resource values. The Final SEIS analyzes the impact of this change.

Alternatives Analyzed

As noted above, three alternatives were considered in detail in the Greens Hollow Final SEIS, including the No Action and two action alternatives, each of which is explained below. Potential impacts associated with each alternative are discussed in detail in Chapter 4 of the Final SEIS. The alternatives incorporate best management practices for underground coal mining and other measures necessary to adequately avoid or minimize impacts to geology, water resources, wildlife, vegetation, threatened and endangered species, cultural resources, socioeconomics, recreational opportunities, visual resources, air quality, including greenhouse gas emissions, and other relevant issues.

Alternative 1-No Action

Under the No Action Alternative, the Greens Hollow Tract would not be offered for leasing and there would be no coal mining within the Tract at this time. The No Action Alternative provides a baseline for estimating the effects of the action alternatives. This alternative, identified as Alternative 1 in the Final SEIS, would have the least impact on the environment, but was determined not to be in the public interest based on the analysis in the EIS and was not selected.

Alternative 2- Proposed Action

The Proposed Action assumed that the Forest Service would consent to the BLM offering for lease the 6,175 acres of NFS lands in the Greens Hollow Tract for development of federal coal resources. The Proposed Action includes special coal lease stipulations from the Land and Resource Management Plan (LRMP) for the Manti-La Sal National Forest (Appendix 3 to this ROD) for the protection of non-mineral resources. Under the Proposed Action, the BLM would offer, sell, and issue the lease with standard lease terms, conditions, and stipulations for the Tract, which would result in the mining of an estimated 56.6 million tons of recoverable federal coal reserves representing about 8.8 years of mining at current annual production rates. The standard lease terms and conditions include a general provision to prevent "damage or degradation to any land, air, water, heritage, biological, visual, and other resources..."

The analysis of the Proposed Action and alternatives to it is based upon a Conceptual Mine Plan and Reasonably Foreseeable Surface Use Scenario (Final SEIS, Section 2.6). For the Proposed Action, the Conceptual Mine Plan assumed full-extraction mining could occur over the entire Greens Hollow Tract, and thus the analysis assumed that all lands in the Tract could be subsided in order to evaluate environmental effects. However, site-specific exceptions to Special Stipulation #9 would not be considered for areas identified for specific protection in this alternative (labeled in the Final SEIS and Exhibit 1 below as "Area of No Subsidence Mining"). Alternative 2 was not selected due to concerns regarding the potential indirect effects associated with subsidence within portions of the lease tract boundary, as described below with respect to Alternative 3.

Alternative 3 – Selected Alternative

Alternative 3 (the selected alternative) was developed to address issues raised during public and agency scoping regarding the protection of certain surface resource areas more susceptible to the projected effects of subsidence within the lease tract boundary. These concerns included potential impacts to water, geology, vegetation, wildlife habitat, and cultural resources. Thus, this alternative evaluated the use of full-support mining in specific locations to protect surface resources from subsidence. Areas of concern include perennial streams where surface flow could be lost due to subsidence-induced cracking of surface expressions of the Castlegate Sandstone or where escarpment rock could slough, disturbing archaeological sites.

This alternative assumed that the Forest Service would consent to the BLM leasing the 6,175 acres of NFS lands in the Greens Hollow Tract with stipulations to protect non-mineral resources. All special coal lease stipulations described in the Manti-La Sal National Forest LRMP would be included (See Appendix 3) as part of Forest Service's consent. However, site-specific exceptions to Special Stipulation #9 would not be considered for areas identified for specific protection in this alternative (labeled in the Final SEIS and Exhibit 1 to this ROD as "Area of No Subsidence Mining").

Alternative 3 provides that the BLM would offer, sell, and issue a lease for the Greens Hollow Tract, under the competitive bid process, to develop about 55.7 million tons of recoverable federal coal reserves, representing about 8.7 years of mining at current production rates. The lease for the Tract would be issued by the BLM along with standard lease terms, conditions, and special stipulations required by the Forest Service's consent to lease.

Environmentally Preferred Alternative

In accordance with the CEQ regulations (40 CFR § 1505.2(b)), the environmentally preferred alternative must be identified in the ROD. From the perspective of causing the least amount of change to the natural environment, the No Action Alternative would be preferable. Although the No Action Alternative is considered by the BLM to be the environmentally preferred alternative, it was not selected because it was determined to be not consistent with the BLM's multiple-use and sustained yield policy and applicable laws and regulations related to the management of federal mineral resources.

Conceptual Mine Plan and Reasonably Foreseeable Surface Use Scenario

Leasing results in a conveyance of rights and represents a commitment of resources. Projections of conceptual subsequent post-leasing development (both underground mining and projected surface uses) are used to analyze the indirect and cumulative effects to establish a baseline for the lease stipulations that may be necessary to protect surface resources. If the subject tract is leased, then approval of specific mine plans and surface uses would be subject to subsequent review and approval procedures of the Utah DOGM and the OSMRE. Any future mining and surface uses would be conducted consistent with all lease terms, conditions, and stipulations.

The decision in this ROD incorporates a conceptual mining and surface use scenario, including full support mining for areas of specific protection identified in the Final SEIS under Alternative 3. If leasing of the Greens Hollow Tract occurs, the coal resources would be developed using underground mining techniques. The only surface facilities would be those necessary for improvements for safety and the efficient recovery of the coal resources, which could include ventilation shafts, power transmission lines for the ventilation system and the mine, systems for potential escapeway needs, and road maintenance for access.

The conceptual mining plan assumes that mining would be done through the existing SUFCO mine workings, thus reducing potential surface impacts that could occur if the Tract were accessed from another location. Mining from any other location or access would require both additional NEPA evaluation and additional UDOGM/SMCRA permitting. Mining from another location or access point to the tract would also be environmentally and economically undesirable because of the costs and additional surface disturbance associated with the construction of new surface facilities and the creation of a new access point. Conceptual underground workings would be extended through the western portion of existing federal and state leases to the Greens Hollow Tract (the state leases lie within the existing permit area but are not part of the federal approved mine plan). The mains and submains would remain open until the end of mining in the area. Longwall or full-extraction mining could occur throughout the majority of the conceptual mine plan area, which could result in subsidence in most of the approved lease Tract area (except those areas identified for Alternative 3, where only first mining will be allowed).

This conceptual scenario assumes that no expansion of the existing surface portal facilities in Convulsion Canyon would be required. Access to the coal reserves would be from existing underground workings in the adjacent leases. Water discharge would be from existing permitted discharge points in Quitchupah Creek in Quitchupah Canyon. The water quality of future discharge would be similar to current discharge collected from the adjoining active SUFCO Mine, as the same geologic conditions would exist in the new lease area and the overall production rates are not anticipated to increase. Mine discharge is regulated by the Utah Pollution Discharge Elimination System (UPDES) permit requirements. Past and current water quality and quantity measurements of SUFCO Mine discharge have met all the applicable standards. In this case, it is expected that the water would be similar in quality to the ground water found in the overlying and underlying geologic material. Increased concentrations of some constituents would occur due to oxidation of sulfide minerals in exposed rock and chemical reactions with roof bolts and other materials introduced into the mine. Constituents influenced by these processes primarily include sulfate, iron, and manganese. Levels of pH are typically reduced in the discharge. The SUFCO Mine water discharge would experience spikes in dissolved metals (primarily iron) and other dissolved solids that enter solution as the mine floods. Over time, the dissolved solids should diminish as the Mine is flushed with water.

The reasonably foreseeable surface use model assumed, for the entire analysis, that the surface facilities and improvements would be two areas containing ventilation shafts (one or possibly both with a ventilation fan system and two or more reserve diesel generators for power), power transmission lines for the ventilation fan system and the mine, systems for potential

escapeway needs, and road access. Again, these improvements, if needed, would be subject to applicable UDOGM and SMCRA permitting requirements.

Conceptual Underground Mining and Subsidence

Two coal seams occur in the lease area, the Upper and Lower Hiawatha. The Lower Hiawatha coal seam has mineable coal thickness throughout the lease tract and all mining is presently projected to occur in the Lower Hiawatha seam. The approval to offer for competitively lease in this ROD assumes that the coal in the Greens Hollow Tract could be directly accessed from the southeast through an extension of underground workings in the existing SUFCO Mine.

The coal would be recovered using longwall mining methods. Overburden in the area ranges from between approximately 1,000 and 2,200 feet. The anticipated mining height is some 12 feet for the Lower Hiawatha Seam. Based on experience with mines adjacent to the tract area and mining elsewhere in the Wasatch Plateau Coalfield, it is projected that the land surface could subside up to about 8 feet based on the overburden thickness and projected mining height. Surface expressions from subsidence, at the adjacent SUFCO mine, occur in limited areas depending on overburden thickness and the amount of rigid sandstone members in the overburden near the surface. The subsidence typically varies from 36 to 66 percent of the mining height.

Surface subsidence will occur and in limited areas surface cracking will occur. Past monitoring of similar mining activity indicates that this surface subsidence and surface cracking can lead to the dewatering of streams, riparian areas, and surface springs and seeps. In the desert and the arid environment of central Utah, surface water is critical for agriculture, for municipal water systems, and for the benefit of natural resources that depend on surface water. To date, there does not appear to be a feasible sustainable method to replace surface water lost through subsidence and surface cracking. Therefore, Alternative 3 was developed to protect certain surface water resources by eliminating any mining from areas inside of stream buffers and angle of draw buffers where there is less than 50 feet of alluvium and/or Price River Formation materials over the Castlegate sandstone formation. In areas where there is more than 50 feet of alluvium, it is expected that enough fine material are present to seal tension cracks and prevent surface dewatering.

The conceptual plan assumes that full support (i.e. first or development mining only) type mining would occur under the geographic areas of specific resource concern (Areas of No Subsidence Mining) to prevent subsidence of the overburden, and therefore of the land surface.

Other Alternatives Considered but Eliminated from Detailed Analysis

Federal agencies are required by NEPA and CEQ regulations to explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not studied in detail (40 CFR § 1502.14(a)).

Lease the Tract as in Original Application

The LBA as filed for the Greens Hollow Tract contained 5,636.79 acres, after which the relevant area was revised by the BLM to include an additional 538.60 acres for a total of 6,175.39 acres. After review by the BLM, and additional review by the Tract Delineation Team, the Tract was increased by another 521.02 acres (6,696.41 acres total) to comply with competitive leasing requirements, increase the Federal Reserve base, allow for lease modifications or new leasing (should further exploration and mining in this area prove viable), and allow the recovery of additional reserves from adjacent State lands.

However, prior to completing the NEPA analysis, the decision was made by the BLM to remove the 521.02 acres in the southwest and west portions of the Tract because the areas did not meet data adequacy standards at that time. It was determined that the coal in these areas would not be isolated and could still be mined in the future under a separate access. Thus, the BLM modified Tract, totaling 6,175.39 acres, was analyzed in the Final SEIS to ensure that it met all conditions required by applicable laws and regulations.

Lease Tract Boundaries Change Resulting from Application of the Unsuitability Criteria

As required by applicable law and regulations, the Unsuitability Criteria for Coal Mining described at 43 CFR Subpart 3461 was applied site-specifically to lands in the Greens Hollow Tract. No lands were identified as unsuitable and no additional stipulations were identified based on that analysis, thus, application of the criteria did not result in a new alternative.

Lease Without Special Coal Lease Stipulations

Consideration was given to developing an alternative that would analyze leasing of the Greens Hollow Tract without stipulations to protect surface resources. This alternative was not carried forward for detailed analysis as it would be inconsistent with the Manti-La Sal and Fishlake Forest Plans and the legal and regulatory framework governing coal resource management and other specific resource protection. Further, without stipulations to protect surface resources, the Forest Service would likely not grant consent to lease, which is required by regulation (43 CFR § 3400.3-1).

Sustainable Multiple Use Alternative

A Sustainable Multiple Use Alternative (SMUA) was suggested during public scoping. This alternative contained terms that the commenter felt should be included in an alternative for mining activities.

A detailed review and analysis of the objectives of the SMUA was completed. Most of the extensive list of terms contained in the SMUA reflected the range of stipulations and mitigation measures that are currently available to the agency in developing, assessing, and approving any alternative considered in an EIS. Thus, some aspects of SMUA were employed, as appropriate, to avoid or mitigate impacts identified through the analysis. However, other listed terms in the alternative were either too general to be of use in formulating a separate alternative (e.g.,

require site-specific environmental review of any proposal to lease particular lands for mineral extraction), or too subjective (e.g., accommodate the public's increasing sensitivity to development within currently natural landscapes). The suggested alternative was more suitable for a programmatic level review than for a specific proposed action. Therefore, the noted terms of the SMUA were considered in the analysis but no alternative embracing all of the terms was developed for detailed analysis.

Underground Mining from Another Portal Site

Conceptual underground mining plans were developed following review and consideration of plans to mine adjacent coal leases or known resources in the Muddy Creek mine plan, the Quitchupah Coal Lease Tract, the School & Institutional Trust Lands Administration (SITLA) Coal Lease Tract, and the existing mine workings. Using this information, it was anticipated that the Greens Hollow Tract could be mined most efficiently and economically, and with the least environmental effects, through the existing mine workings. It is possible for a company other than the proponent to lease, hold or re-sell, or propose portals off-site and located where SUFCO does not have current leases; however, the Proposed Action and alternatives were developed assuming that access to coal reserves would be from SUFCO's existing workings rather than from a new mine portal.

If the Greens Hollow Tract were to be accessed from the Muddy Creek Canyon, it would require building a new mine portal in a narrow canyon with a perennial stream. Because the canyon becomes narrow and steep-sided, the portal would have to be located some 2 miles or more from the Tract boundary and require excavating underground workings from the portal to reach the Tract. Accessing the coal reserves from another future to-be-leased area could require the construction of a new portal and associated infrastructure, resulting in additional surface impacts including a new access road. Under this alternative, non-mineral resources would be impacted much more extensively if an entry location other than the existing Convulsion Canyon access were chosen. Given these projected effects, access from Muddy Creek Canyon was not considered in the conceptual mine plan, and was eliminated from detailed analysis. The BLM does not believe mining from a new portal is reasonably foreseeable. Moreover, if after leasing, an alternative mine plan is submitted which includes a new portal additional environmental analysis would have to occur as part of the permitting process for that tract.

Decision

In its ROD issued on October 5, 2015, the Forest Service consented to the leasing of the Greens Hollow Tract pursuant to terms, conditions, and special stipulations identified in its ROD. Based on that decision, the BLM is able to make a decision whether to offer the Tract's federal coal reserves for sale pursuant to the applicable rules and regulations governing federal coal leasing.

After thoroughly considering the analysis in the Final SEIS and related analyses, including all public comments received, it is the decision of the BLM to offer the Greens Hollow Tract at a competitive lease sale. As explained above, if the Tract is sold it would be developed using

underground mining techniques, consistent with all applicable laws and regulations and special stipulations for protecting non-mineral resources. The coal lease tract is identified in Exhibit 1 and described in Appendix 1 to this ROD. The coal lease terms, conditions, and stipulations, which were identified in the Forest Service ROD, and this decision are consistent with the applicable legal and regulatory requirements and will mitigate impacts to important resource values identified during both the BLM review process and the extensive public scoping and comment period conducted by the BLM in connection with the sale of the Greens Hollow Tract.

Alternative 3, as described above and in Chapter 2 of the Final SEIS, is hereby selected for the leasing and mining of the Greens Hollow Tract. In selecting Alternative 3, it is acknowledged that the Forest Service consents to the leasing of the Tract pursuant to the analysis, findings, and requirements of Alternative 3 in the Final SEIS, which includes the Conceptual Mine Plan and Reasonably Foreseeable Surface Use Scenario described in the Final SEIS (Section 2.6). The Conceptual Mine Plan includes the reasonably foreseeable installation of a ventilation shaft off the lease and associated facilities, a ventilation shaft on the lease and associated facilities, a power transmission line, and access road maintenance.

Rationale for the Decision

A number of considerations support the decision to offer the Greens Hollow Tract for competitive sale under Alternative 3, and are set forth below.

This action is consistent with the BLM's coal leasing program under the authority of the MLA, as amended by the Federal Coal Leasing Amendments Act of 1976 (FCLAA), as supplemented in 1978. Development of the federal coal resources found in the Tract is recognized as an appropriate use of public lands within the Wasatch Plateau Coal Field under the applicable Forest Service and BLM land use plans. The selected alternative (Alternative 3) meets the purpose and need for the project by providing appropriate opportunities for leasing and development of mineable federal coal resources and making cleared tracts available for mining, subject to appropriate terms, conditions, and stipulations identified by the applicable review and planning process. As explained above, the other alternatives do not meet these objectives.

Alternative 3 requires the use of measures to avoid or mitigate subsidence impacts where surface cover (Price River Formation and/or alluvial/colluvial material) is less than the minimum assumed necessary to protect hydrological resources and other related surface resources from unacceptable impacts due to subsidence caused by underground mining activities. Alternative 3 also establishes stream protection buffer zones along Muddy Creek, for perennial and intermittent segments of the North Fork of Quitchupah Creek, for Greens Hollow and Cowboy Creek, and within intermittent tributaries to Muddy Creek. Finally, Alternative 3 protects cliff escarpments that could slough, potentially affecting archaeological sites due to subsidence caused by underground coal mining.

Water resources identified for protection within a lease of the Greens Hollow Tract are tabulated below in Table 1 of Appendix 3, and on the map in Exhibit 2 to this ROD. Protection of water resources are provided for through Special Stipulations 9 and 17 in Appendix 3 to this ROD. Flow from these water resources must be maintained to support grazing, protect wildlife,

and maintain the existing riparian habitat. These protective measures will benefit the following resources, as noted in the Final SEIS:

- Geology: Although total recoverable coal reserves would decrease and potential lost in-place coal resources would increase, excluding full-extraction mining from the protected areas would minimize the risk of water displacement, or water loss in the case of Muddy Creek. Excluding mining from within less than 350 feet of cliff escarpments would also mitigate the risk of spalling and rock fall within the Greens Hollow Tract.
- Surface and Groundwater: Exclusion of full-extraction mining from areas with less than about 50 feet of Price River Formation above Castlegate Sandstone would protect spring M-SP87 from water loss to surface tensile fractures. Buffers would also eliminate the occurrence of surface tensile fractures in areas with less than about 50 feet of Price River Formation above Castlegate Sandstone, which are at greatest risk for impacts to hydrology.
- Terrestrial and Aquatic Wildlife: Excluding segments of perennial streams at greatest risk from subsidence mining would protect associated wildlife habitats, including riparian habitat and wetlands, and other aquatic species.
- Vegetation: Exclusion of full-extraction mining from the sensitive areas and escarpments would reduce the acres of vegetation potentially affected from subsidence by approximately 698 acres in the Greens Hollow Tract and by approximately 860 acres in the larger area of analysis in the Final SEIS. Three wetland areas that occur in the excluded areas would also be protected, as well as narrow riparian corridors along Muddy Creek, Greens Hollow, Cowboy Creek, and the North Fork of Quitcupah Creek.
- Heritage Resources: Seven prehistoric or prehistoric/historic sites, including Rock Shelters, located within the area of no subsidence mining, would be protected from escarpment failure.
- Socioeconomic Resources: Areas excluded from subsidence mining would result in minable coal being left in place. However, this amount of coal is relatively small and would only reduce the life of the mine by approximately 2 months and the total royalty revenues paid by a small amount relative to Alternative 2.

In addition to the measures related to subsidence, other factors informed the BLM's decision to offer the Greens Hollow Tract for competitive lease sale. These include:

- The BLM, as joint lead agency, is responsible for deciding whether to lease federal coal resources in response to an application filed by interested parties. That decision must be consistent with the applicable requirements of the MLA, FLPMA and the FCLAA, and their implementing regulations. Under these authorities, the BLM is responsible for, among other things, advancing the safe and responsible development of the nation's mineral resources, while also promoting the conservation of our Federal Lands and the protection of their scientific, historic, and environmental values.

- When an LBA for Federal coal is submitted, the BLM is obligated to respond to the application in a timely manner, and ultimately determine whether or not the sale of the tract in question is in the public interest. The BLM, along with the surface management agency when it is not BLM, is also responsible for setting the terms, conditions, and stipulations attached to any lease approved for sale. In order to process an LBA, the BLM must fulfill the requirements of NEPA by preparing the necessary environmental analyses and to provide agency decision-makers and the public with a complete and objective evaluation of the environmental impacts of leasing and mining the Federal coal contained in the lease tract.
- This decision to offer the Greens Hollow Tract (6,175 acres containing approximately 55.7 million tons of recoverable Federal coal reserves) for lease is responsive to the LBA received by the BLM on October 13, 2005. The tract being approved for sale by the ROD was developed in response to an application by Ark Land Company, now Canyon Fuel Company, LLC, which is now a subsidiary of Bowie Resources, LLC. That LBA was submitted to extend the life of the existing SUFCO Mine, which is adjacent to the Tract. As explained above, access to the tract by the winning bidder would be through the existing mine works at the SUFCO mine. Like the coal from the existing mine, the Greens Hollow Tract would allow the winning bidder to continue supplying low sulfur compliance coal to power plants in Utah for generating electricity and other uses. This low sulfur coal enables those coal-fired power plants to meet Clean Air Act emission requirements.
- This decision is also consistent with the BLM's responsibilities to ensure that the coal resources it manages are administered in an environmentally responsible way and that helps meet our energy needs, while ensuring that taxpayers receive a fair return from the sale of those resources.
- The leasing and subsequent mining of Federal coal reserves provides the United States, the State of Utah, and its affected counties with income in the form of lease bonus payments, rental payments, lease royalty payments, and tax payments. The Utah Governor, legislature, and other state and local officials have expressed their continuing support for federal coal leasing.
- The BLM's selected alternative (Alternative 3) provides for near maximum economic recovery of the coal resource in the tract, while avoiding and/or mitigating impacts to important non-coal surface resources.
- The U.S. Fish and Wildlife Service (USFWS) provided written concurrence with the findings of the Biological Assessments prepared by the BLM pursuant to Section 7(a)(2) and (c) of the Endangered Species Act of 1973, as amended. As explained above, in concert with the USFWS and the Forest Service, special stipulations for wildlife will be required by the BLM in any lease issued for the Greens Hollow Tract. As part of its review, the BLM prepared a Supplemental Biological Assessment. That assessment

determined that there would be no effect on federally-listed threatened and endangered species under the alternatives analyzed. Therefore, separate consultation with the USFWS was not required.

- National Historic Preservation Act consultation with the Utah State Historic Preservation Office (Utah SHPO) was completed on June 9, 2011. Consultation with the affected Native American tribes and the Utah SHPO on potential impacts to tribal and cultural resources has been completed and concerns have been resolved through a Memorandum of Agreement signed on November 30, 2011.
- Finally, the BLM has determined that this decision is compliant with all applicable existing laws, regulations, and the Resource Management Plan as described in Section 4.17 of the Final SEIS. The sale of this tract is also consistent with Secretarial Order (SO) 3338, which directed BLM to undertake a programmatic review of the federal coal program. While the Order directs the BLM to place a pause on the issuance of new coal leases until the review is completed, it does include enumerated exceptions that allow for coal lease sales or the issuance of lease modifications to proceed under limited circumstances. The Greens Hollow Tract is covered by the exception found in Section 6(e) of SO 3338 because it had a ROD that had been issued by the “applicable surface management agency as of the date of this Order.” Here, the Forest Service issued its ROD in October 2016.

As noted in the Final SEIS (Section 1.11.1), the Greens Hollow Public Scoping effort and internal agency review were the methods used to develop issue statements for each resource. The issue statements guided development of the SEIS, and the affected environment and environmental consequences for each resource were structured around these issue statements (Final SEIS, Chapters 3 and 4). This process focused the analysis on the key concerns and impacts associated with the Proposed Action and the Alternatives. Each issue statement was specifically considered as it related to the decision to select Alternative 3. As more specifically identified above, Alternative 3 minimizes the impacts to key resources analyzed in the Final SEIS.

The BLM weighed and balanced the results of resource impact analyses in making this decision. The detailed analyses in the Final SEIS indicated that the benefits of leasing outweighed the potential negative impacts to resources and that these potential impacts could best be mitigated by implementation of Alternative 3.

The selected alternative (Alternative 3) best meets the purpose and need to consider leasing additional federal coal reserves to support continued economic production, while protecting important surface resources. The selected alternative, with insertion of all applicable regulatory conditions, other conditions of approval, and the special lease stipulations, allows for the economic development of coal resources while safeguarding other lease tract resources. All practicable means to avoid or minimize environmental harm resulting from this decision have been adopted. As previously stated, the selected alternative (Alternative 3) was designed and developed to maximize economic recovery of the coal resources while avoiding and

minimizing potential environmental harm that could result as outlined above and in the Final SEIS.

Terms, Conditions, Stipulations, and Monitoring

This approval includes Standard Terms and Conditions and the Special Coal Lease Stipulations included in Appendices 2 and 3 to this ROD.

Public Involvement

The Notice of Intent (NOI) for the Greens Hollow Federal Coal Lease Tract EIS was printed in the Federal Register (Vol. 73, No. 29, pp. 8060-8062) on Tuesday, February 12, 2008. The NOI designated a 45-day comment period ending March 28, 2008, when comments would be most useful preparation of the EIS. A public scoping notice was also prepared and distributed on February 22, 2008 to interested individuals on the BLM, Price Field Office and Manti-La Sal and Fishlake National Forests mailing lists. A legal notice was also sent to local newspapers (Richfield Reaper, Sun Advocate, Emery County Progress, and Salina Sun) to notify the general public through newspaper releases and media coverage. Comments were to be directed to the agency project manager in the BLM, Price Field Office. A scoping content analysis of the comments received was prepared and used to develop the issues to be considered in the EIS.

A notice of public hearing was published in the Federal Register by the BLM on April 13, 2009 (Vol. 74, No. 69, pgs. 16891-92). Parties on the distribution list were sent copies of the Draft EIS at that time. A 45-day comment period on the Draft EIS commenced with publication of the Notice of Availability and ended on May 18, 2009. Comment letters and e-mails regarding the draft EIS were received from various parties opposing or expressing support of the proposed Greens Hollow coal leasing project.

A FEIS and Record of Decision (ROD) for the Greens Hollow Federal Coal Lease Tract were released by the FS and BLM in December 2011. Interested parties on the mailing list were sent a notification dated December 14, 2011 of the release of the FEIS and ROD. An EPA NOA was published in the Federal Register (Vol. 76, No. 247, pp. 80367-68) on Friday, December 23, 2011.

An appeal of the ROD was filed with the Regional Forester on February 13, 2012. On March 20, 2012, based on issues raised in the appeal, the ROD was withdrawn pending further analysis.

The Forest Service NOI was published in the Federal Register (Vol. 77, No. 202, pp. 64097-64099) on Thursday, October 18, 2012 announcing the intent to prepare a supplemental EIS on the Greens Hollow Federal Coal Lease Tract. Additional scoping was not conducted in accordance with 40 CFR 1502.9(c)(4). There was a 45-day comment period after the Draft SEIS was issued.

The EPA published a NOA for the Draft SEIS in the Federal Register on March 14, 2014. Legal Notices of Opportunity to Comment were published in the Richfield Reaper and the Sun Advocate newspapers on March 19, 2014 and March 20, 2014, respectively. A total of seven individual letters containing comments were received along with 2,425 form letters. All

comments and input were taken into consideration when developing alternatives and analyzing their potential effects. Comments and input received, agency responses to substantive comments, and resulting changes to the SEIS can be seen in Appendix D of the Final SEIS.

Prior to release of the Draft SEIS, it was determined that the prior BLM - Forest Service public hearing that addressed the Fair Market Value, Maximum Economic Recovery, and the Draft Environmental Impact Statement was sufficient for purpose of compliance with the applicable regulatory requirements. While the SEIS expanded the analysis of project impacts, the geographic scope of the alternatives, quantity of coal involved, and the proposed type of mining were not changed. As result, BLM determined that its prior hearing on Fair Market Value and Maximum Economic Recovery was sufficient.

The EPA published a NOA for the Final SEIS in the Federal Register on February 27, 2015. Legal Notices of the opportunity to object following the 36 CFR Part 218 regulations were published in the Richfield Reaper and the Sun Advocate newspapers of record for the Fishlake and the Manti-La Sal National Forests on March 4 and March 3, 2015, respectively. During the 45-day Forest Service objection period, four objections were filed with the Regional Forester. All comments and issues were reviewed.

The "Record of Decision for the Consent with Stipulations to the BLM Offering for Lease Greens Hollow Federal Coal Lease Tract (UTU-84102)" was signed on October 5, 2015 by the Responsible Officials for the Manti-La Sal and Fishlake National Forests, approving Alternative 3 of the Final SEIS, Chapter 2. A Legal Notice of the decision was published in the Sun Advocate newspaper in Price, Utah on October 8, 2015.

Appeal Procedures

This decision may be appealed to the Interior Board of Land Appeals (IBLA) in accordance with the regulations contained in 43 CFR Part 4. Appeal and stay procedures are outlined on Form 1842-1, which is attached to this ROD as Appendix 4.

Notice of Appeal

Within 30 days of the posting of this decision ("date of service"), a Notice of Appeal must be filed in writing to the office that issued this decision (43 CFR 4.411 and 4.413):

State Director
BLM Utah State Office
440 West 200 South, Suite 500
Salt Lake City, Utah 84101-1345

At the same time, a copy of the Notice of Appeal must also be sent to:

Regional Solicitor
U.S. Department of the Interior
6201 Federal Building
125 South State Street
Salt Lake City, Utah 84138-1180

Statement of Reasons: Within 30 days after filing the Notice of Appeal, you must also file a complete statement of the reasons why you are appealing. This must be filed with:

U.S. Department of the Interior
Office of Hearings and Appeals
Interior Board of Land Appeals
801 N. Quincy Street, Suite 300
Arlington, Virginia 22203

If you fully stated your reasons for appealing when filing the Notice of Appeal, no additional statement is necessary (43 CFR 4.412 and 4.413).

Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor must be served a copy of the document.

At the end of any document that is filed in an appeal, the party filing the document must certify that service has been or will be made in accordance with the applicable rules, and specify the date and manner of service. (43 CFR 4.401(c)). Unless the procedures set forth herein are followed, an appeal will be subject to dismissal (43 CFR 4.402).

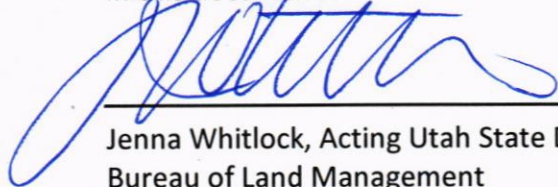
Petition for a Stay: This decision becomes effective upon the expiration of the time allowed for the filing of an appeal unless a petition for a stay is timely filed with a Notice of Appeal (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the IBLA, the petition for a stay must accompany your Notice Of Appeal (43 CFR 4.21). Except as otherwise provided by law, or applicable regulation, guideline, or policy, a petition for a stay of a decision pending appeal must show sufficient justification based on the following standards:

- The relative harm to the parties if the stay is granted or denied;
- The likelihood of the appellant's success on the merits;
- The likelihood of immediate and irreparable harm if the stay is not granted; and
- Whether the public interest favors granting the stay.

A petition for stay of this decision must be filed in the office of the Authorized Officer, which in this case is the BLM Utah State Office.

Approval

In consideration of the foregoing, I approve the offering of the Greens Hollow Federal Coal Lease Tract for competitive leasing subject to the terms, conditions, and stipulations identified in this document.



Jenna Whitlock, Acting Utah State Director
Bureau of Land Management

AUG 12 2016

Date